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**REMARKS****I. Formalities**

The January 11, 2007, Office Action rejects claims 10, 11, and 14-32. This Response amends claim 11 and adds new claims 33-41, which are supported by Figures 1-4 and paragraphs [0015] through [0018]. Accordingly, no new matter is added. After entry of the amendment and new claims, claims 11, and 14-41 are pending in the application, which includes 3 independent claims. A previous response to an Office Action canceled claim 10, therefore Applicant will not address the rejection to claim 10 in this response. In view of the foregoing remarks, Applicant respectfully requests the Patent Office to reconsider the application. This Response adds no new subject matter.

**II. Amendment to the Specification**

Please amend the patent title as indicated in marked-up form below per 37 C.F.R. §1.121(b), where deletions are shown struck through.

~~Method of Manufacturing~~ A Face Plate for a Golf Club Head

**III. Response to the 35 U.S.C. §103 Rejections**

The Patent Office rejects claims 10, 11, and 14-32 under 35 U.S.C. §103(a) as being allegedly "unobvious" over U.S. Patent No. 6,899,638 issued to Iwata et al., ("Iwata"). Applicant believes that the Patent Office meant the claims are "unpatentable" or "obvious" in light of Iwata. Applicant presents the following response under the assumption that the Patent Office meant to state the claims were unpatentable or obvious, in light of Iwata. As noted earlier, Applicant amends independent claim 11 herein.

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**IV. Remarks regarding Claims 10, 11 and 14-20**

**A. Remarks Directed to Independent Claim 10**

The Patent Office rejects claim 10 in the present Office Action, but Applicant canceled claim 10 in a previously filed Office Action Response dated January 19, 2005. Thus, no further response is required for this rejection of claim 10.

**B. Remarks Directed to Independent Claim 11**

The Patent Office rejects claim 11 as being "unpatentable" or "obvious" in light of Iwata. Specifically, the Patent Office states that Iwata discloses a golf club head comprising a faceplate having a contoured rear surface wherein the contoured rear surface includes a central thickened region having a non-circular, elliptical outer edge surrounded by a transition region tapering from the central thickened region to a thinner peripheral region wherein the transition region also has an elliptical outer edge.

In general, the Iwata reference is directed towards a club head face that comprises different transition regions located at a periphery of a central thickened region having an elliptical outer edge. These transition regions have different thicknesses and are less thick than the central thickened region. See, Figures, 9-12, 14-17, 19, 21-80, and 84-85, and the related discussion of these Figures in the specification. Iwata discloses some of these transition regions to have an elliptical shape, but the elliptical shape of these transition regions never has: (1) each of its major and minor axes equal to the major and minor axes, respectively, of the central thickened region plus a single predetermined distance, as required by claim 11, and (2) each point along the outer edge of the elliptical shape of the transition region displaced outward from the elliptical outer edge of the central thickened region by an amount equal to half of the predetermined distance, as also required by amended claim 11.

First, more specifically, Iwata's Figures 1-4 illustrate the configuration of a central thickened region, but do not show any transition regions.

Second, Figures 7 and 8 do show a central thickened region surrounded by a transition region having an elliptical shape, but the elliptical shape of the transition region does not have: (1) each of its major and minor axes equal to the major and minor axes, respectively, of the central thickened region plus a single predetermined distance, as required by claim 11, and (2) each point along the outer edge of the elliptical shape of the transition region displaced outward from the elliptical outer edge of the central thickened region by an amount equal to half of the predetermined distance, as also required by amended claim 11.

For example, with reference to the description to Figure 7 in column 13, lines 44-61, Iwata recites that the major axis of the elliptical shape of the transition region is equal to the major axis of the central thickened region plus 40mm (i.e.,  $(30\text{mm} \times 2) - (10\text{mm} \times 2)$ ) and that the minor axis of the elliptical shape of the transition region is equal to the minor axis of the central thickened region plus 20mm (i.e.,  $(15\text{mm} \times 2) - (5\text{mm} \times 2)$ ). These different distances (i.e., 40mm and 20mm) teach away from the claimed "predetermined distance" (singular) of claim 11.

Iwata's Figure 8 shows, in a similar manner to Figure 7, that the major axis of the elliptical shape of the transition region is equal to the major axis of the central thickened region plus 30mm (i.e.,  $(25\text{mm} \times 2) - (10\text{mm} \times 2)$ ) and that the minor axis of the elliptical shape of the transition region is equal to the minor axis of the central thickened region plus 20mm (i.e.,  $(15\text{mm} \times 2) - (5\text{mm} \times 2)$ ). These different distances (i.e., 30mm and 20mm) also teach away from the claimed "predetermined distance" (singular) of claim 11.

Applicant's invention, generally requires, that a first ellipse is also surrounded by a second ellipse, but the transition from one to the other is a "predetermined distance..... wherein each point along the second non-circular, elliptical outer edge is displaced outward from the first non-circular, elliptical outer edge by an amount equal to half of the predetermined distance", as required by amended claim 11. Emphasis added. As discussed above, a close examination of Iwata does not disclose these elements.

For example, Figures 13 and 18 of Iwata show transition regions having an elliptical outer edge that is displaced outward from the elliptical outer edge of the central thickened region by more than one distance. Accordingly, Iwata also teaches away from the above-identified limitations in claim 11.

Next, the Patent Office contends that Applicant does not disclose any additional benefits of having a contoured rear surface of the transition region. Accordingly, the Patent Office asserts that the conclusion can be made that the differently contoured rear surface of Iwata provide identical results. The Patent Office contends that one having ordinary skill in the art would have found the contour of the rear surface to be a "matter of choice" and that any shaped profile would perform equally as well so long as the mis-hits are reduced.

Applicant disagrees. The Patent Office applies hindsight to arrive at a determination of obviousness by using the claimed invention as an instruction manual or a template to modify the prior art and render the claimed invention obvious. The Patent Office has not shown any prior art references that provide any teaching, motivation, or suggestion to modify Iwata to make obvious Applicant's claimed invention. Specifically, nothing in Iwata provides for,

a central thickened region having a first non-circular, elliptical outer edge surrounded by a transition region tapered from the central thickened region toward a thinner peripheral region, the transition region having a second non-circular, elliptical outer edge ...

wherein the second non-circular, elliptical outer edge has a second aspect ratio, a second major axis and a second minor axis, the second major axis being equal to the first major axis plus a predetermined distance and the second minor axis being equal to the first minor axis plus the predetermined distance ...

wherein each point along the second non-circular, elliptical outer edge is displaced outward from the first non-circular, elliptical outer edge by an amount equal to half of the predetermined distance.

as claimed in claim 11. Moreover, as recently held by the U.S. Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*, No. 04-1350 (April 30, 2007), "In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim." The Court also recited using a "common sense" approach to determine the obviousness of the claim in light of the prior art available. The Patent Office, however, has not set forth any such approach, and Applicant knows of none, requiring how one skilled in the art would modify Iwata to make obvious the presently claimed invention. Iwata does not teach or suggest, or even lead one in the direction of, the claimed invention.

Furthermore, Applicant asserts several advantages of the present invention. First, the claimed invention of amended claim 11 has an advantage over Iwata of a less expensive face plate. As shown in Iwata, the various face plate configurations are complex, having numerous polygonal regions that no doubt require costly, extensive, and precise machining, dimensional tolerance confirmation, finishing, etc. Applicant's invention, however, as claimed in amended claim 11, clearly provides for a more cost effective product. Second, the face plate as claimed in amended claim 11 has a more efficient energy transfer across the face plate when the face plate strikes a golf ball, when compared to the prior art. Third, the invention, as claimed in amended claim 11, provides for an efficient structure to improve the durability of the faceplate to prevent failures, such as cracking, and improves this durability using a smaller amount of mass, compared to the prior art.

Thus, in light of Applicant's above arguments, Applicant respectfully requests the Patent Office to withdraw the rejection to claim 11.

**C. Remarks Directed to Dependent Claims 14-20**

37 C.F.R. 1.75(c) and M.P.E.P. 608.01(n) requires one to construe dependent claims to include all of the limitations of the claims from which the dependent claim depends. Claims 14-20 depend directly from independent claim 11 and, therefore, include all of the claim 11 elements. As argued above, Iwata does not show each and every element of independent claim 11. Accordingly, Iwata does not render unpatentable dependent claims 14-20 for at least the same reasons as listed earlier for claim 11. Thus, Applicant respectfully requests the Patent Office to withdraw the rejection to dependent claims 14-20 as well.

**V. Remarks regarding Claims 21-26**

**A. Remarks Directed to Independent Claim 21**

The arguments relating to claim 11 above are likewise applicable to independent claim 21. Claim 21 recites, among other things,

... a central region having a first elliptical outer edge surrounded by a transition region extended from the central region to a peripheral region ...

wherein the second elliptical outer edge has a second aspect ratio, a second major axis and a second minor axis, the second major axis being equal to the first major axis plus a predefined distance and the second minor axis being equal to the first minor axis plus the predefined distance, and the second aspect ratio being less than the first aspect ratio.

Emphasis added.

Thus, in similar fashion to claim 11, claim 21 recites a “predefined distance”, and in light of Applicant’s above arguments, Applicant respectfully requests the Patent Office to withdraw the rejection to claim 21.

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**B. Remarks Directed to Dependent Claims 22-26**

37 C.F.R. 1.75(c) and M.P.E.P. 608.01(n) requires one to construe dependent claims to include all of the limitations of the claims from which the dependent claim depends. Claims 22-26 depend directly from independent claim 21 and, therefore, include all of the claim 21 elements. As argued above, Iwata does not show each and every element of independent claim 21. Accordingly, Iwata does not render unpatentable dependent claims 22-26 for at least the same reasons as listed earlier for claim 21. Thus, Applicant respectfully requests the Patent Office to withdraw the rejection to dependent claims 22-26 as well.

**VI. Remarks regarding Claims 27-32****A. Remarks Directed to Independent Claim 27**

The arguments relating to claims 11 and 21 above are likewise applicable to independent claim 27. Claim 27 recites, among other things,

... a first region having a first elliptical outer edge,  
a second region having a second elliptical outer edge, and a  
transition region between the first region to a second  
region, ...

wherein the first elliptical outer edge has a first  
aspect ratio, a first major axis and a first minor axis,

wherein the second elliptical outer edge has a  
second aspect ratio, a second major axis and a second  
minor axis, the second major axis being equal to the first  
major axis plus a predefined distance and the second minor  
axis being equal to the first minor axis plus the predefined  
distance, and the second aspect ratio being less than the  
first aspect ratio.

Emphasis added.

Thus, in similar fashion to claims 11 and 21, claim 27 recites a “predefined distance”, and in light of Applicant’s above arguments, Applicant respectfully requests the Patent Office to withdraw the rejection to claim 27.

**B. Remarks Directed to Dependent Claims 28-32**

37 C.F.R. 1.75(c) and M.P.E.P. 608.01(n) requires one to construe dependent claims to include all of the limitations of the claims from which the dependent claims depend. Claims 28-32 depend directly from independent claim 27 and, therefore, include all the claim 27 elements. As argued above, Iwata does not show each and every element of independent claim 27. Accordingly, Iwata does not render unpatentable dependent claims 28-32 for at least the same reasons as listed earlier for claim 27. Thus, Applicant respectfully requests the Patent Office to withdraw the rejection to dependent claims 28-32 as well.

**VII. Remarks regarding New Claim 33-41**

Applicant adds new claims 33-41 herein. 37 C.F.R. 1.75(c) and M.P.E.P. 608.01(n) requires one to construe dependent claims to include all of the limitations of the claims from which the dependent claims depend. New claims 33-35 depend directly or indirectly from independent claim 11; new claims 36-38 depend directly or indirectly from independent claim 21; and new claims 39-41 depend directly or indirectly from independent claim 27. Therefore, those dependent claims include all the claim elements from their respective independent claims. As argued above, Iwata does not show each and every element of independent claims 11, 21 or 27. Accordingly, Applicant respectfully submits that new claims 33-41 are allowable for at least the same reasons as independent claims 11, 21, and 27 are allowable.

Furthermore, new claim 33-35 require, “cross sectional profiles of the transition region from the first non-circular, elliptical outer edge to the second non-circular, elliptical outer edge are the same when the cross sectional profiles are taken along perpendicular directions that are collinear with the major and minor axes of the second non-circular, elliptical outer edge.” Applicant respectfully submits that the references



cited by the Patent Office also do not anticipate or make obvious these claimed limitations. Iwata does not anticipate or render obvious claims 33-35 because it is not possible for Iwata to show, disclose, teach, or suggest these additional claim limitations. Thus, claims 33-35 are further allowable for at least this additional reason.

New claims 36-41 require, "wherein cross sectional profiles of the transition region from the first elliptical outer edge to the second elliptical outer edge are the same when the cross sectional profiles are taken along perpendicular directions that are collinear with the major and minor axes of the second elliptical outer edge." Applicant respectfully submits that the references cited by the Patent Office also do not anticipate or make obvious these claimed limitations. Iwata does not anticipate or render obvious claims 36-41 because it is not possible for Iwata to show, disclose, teach, or suggest these additional claim limitations. Thus, claims 36-41 are further allowable for at least this additional reason.

#### **VIII. Examiner Interview Summary**

On May 11, 2007, George Chen and Robert Iussa, attorneys for Applicant, conducted an interview with Examiner Alvin Hunter, regarding amended claim 11 and Iwata.

Applicant thanks Examiner Hunter for his time and assistance with this matter.

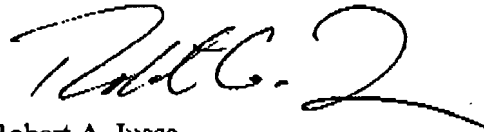
**CONCLUSION**

Applicant earnestly attempts to place this case in a condition for allowance by this response. Applicant respectfully requests the Patent Office to reconsider the application and allow all the pending claims, in light of the above remarks.

Applicant encloses all fees due for this Response to Office Action. However, Applicant authorizes the Commissioner for Patents to charge any additional required fees needed by this Response to Office Action, or to credit any overpayment, to Account No. 02-4467.

If a telephone call to discuss matters will assist the Patent Office to further prosecute this application, Applicant invites Examiner Alvin A. Hunter to call the signing attorney at the Examiner's convenience.

Respectfully submitted,



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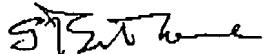
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**CERTIFICATE OF TRANSMITTAL UNDER 37 C.F.R. 1.8.**

I hereby certify that this document (and any referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 on May 11, 2007, to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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